

ARGUMENTS/REMARKS

Response to claim objections

Applicant's attorney apologizes for erroneously including two claims numbered 58 and no claim 59. The second occurrence of claim 58 has been amended to become claim 59, and with this amendment it is believed that all claim numbering errors have been corrected and withdrawal of the objection is respectfully requested.

Response to rejections based on prior art

Claims 2-7, 11-46, and 50-67 remain for prosecution in this application. Certain of the claims have been amended as indicated above. Claims 2, 50 and 57 are independent claims.

Reconsideration is respectfully requested of the rejection under 35 U.S.C. § 103(a) of claims 2, 7 and 11-46 as unpatentable over Yacenda et al 5,822,418 ("Yacenda") further in view of newly cited U.S. patent to Bennett, III et al 6,370,233 ("Bennett"). Applicant respectfully submits that the present invention includes an information recording and updating arrangement neither found in nor suggested in these references, as explained more fully below.

As described in independent claim 2 the system of the present invention is "for managing telephone service for a plurality of persons sharing a common telephone line" and is "based on determining whether a person sharing the common telephone line is at the location served by the common telephone line". In the system of claim 2, each of the persons sharing the common telephone line carries a transmitter adapted to accompany the person (e.g., as a wallet card (claim 3) or keychain fob (claim 4)). The system utilizes the following information recording and updating arrangement:

- A base station at the location of the common telephone line (e.g., at a residence) contains a receiver, a processor, and for each person sharing the common telephone line, **a base station database record** unique to the person and correlating the unique signal emitted by the person's transmitter to the unique database record.

- The base station has a **telephone connection to the public switched network.**
- A controller in the network contains a **network database of records** that correspond to telephone numbers in the network, one of the database records corresponding to the number of the common telephone line shared by the plurality of persons.
- The **receiver at the base station detects signals** from a person's transmitter when the person is in close proximity, i.e., at the location of the common telephone line.
- A **base station database record is entered** when the signal is received, and when the signal is failed to be received for a predetermined period of time.
- **When the base station database record *changes*, the base station *initiates a telephone call to the network*, updates the network database to record whether each of the persons sharing the common telephone line is or is not at the location served by the common telephone line, and thereafter *disconnects*.**
- **In accordance with the updated network database records, the network controller determines how to provide services** to the persons sharing the common telephone line.

Yacenda discloses a PBX-based system typically for a single office in which each person is associated with a single telephone connected to the PBX and the persons wander around the office premises away from the location served by their telephone and into locations served by telephones also connected to the PBX associated with other persons. Yacenda deals with the problem of tracking down persons who are visiting locations served by other telephones connected to the PBX, and completing calls to them at the other telephone numbers which are not their telephone numbers. A number of call-completion features are based on the presence, absence or location of the persons as detected by the system.

In contrast, the invention of claim 2 deals with a situation more commonly encountered in the home environment, where many persons (e.g., in a family residence) share a common telephone line which is used to send and receive calls to and from a local office of the public

switched telephone network. The central problem addressed by the present invention is how to simply and effectively provide individualized service to persons all sharing the same phone. A person's presence or absence determines whether calls intended for them are permitted by the network controller to ring through (e.g., claim 13) or result in other actions (e.g., claims 14-17) such as message taking. Likewise a person's presence or absence controls the completion of restricted outbound (claims 19-26) or inbound (claims 27-38) calls, and allows certain other calls, such as emergency calls (claim 39) or other unrestricted inbound calls (claims 40-46) to override outbound or inbound restrictions.

In a record handling and updating arrangement advantageously adapted to this different, usually residential, environment, a local base station keeps a local base station database record and provides a "yes or no" entry to signify the presence or absence of the person at the location served by the common telephone line. **When the base station database record changes, the base station initiates a telephone call to the network, updates the network database to record whether each of the persons sharing the common telephone line is or is not at the location served by the common telephone line, and thereafter disconnects.** In this manner, continuous presence/absence monitoring of individuals sharing the telephone line takes place at the base station and is stored in the base station database record, but updates to the network controller database only **occur when the base station database record changes.** The use of the telephone line, and the resource cost of a telephone call to the network, is incurred only when the base station database record changes, which may at times be infrequent. A telephone call is initiated, the network database is updated, and the telephone call then is disconnected.

In contrast, Yacenda's system discloses a very different information recording and updating arrangement tied to its PBX operating environment, and tied to PBX methods used to communicate between telephone-transceiver 14 and the PBX. Accordingly, Yacenda does not disclose or suggest the information handling arrangement of the present invention.

In the Yacenda patent, the transfer of badge information to the PBX is described in two places: in connection with telephone circuitry at col. 8, line 64 to col. 9, line 10 and in the section entitled "Communication Between the Telephone and the PBX" at col. 10, line 53 to col.12, line 19.

As described by Yacenda at col. 9, lines 1-10, the telephone 14 has a microcontroller 610 which

“formats the badge data including the IR energy level data into a microcontroller data frame (step 730). Microcontroller 610 then waits for an interrupt from the PBX and upon receipt thereof sends the badge data to the PBX. Alternatively, microcontroller 610 forwards the data frame to the PBX in a periodic basis (e.g., every 2 seconds) without any interrupt from the PBX. The data frame may be forwarded to the PBX, for example, via a robbed bit signaling technique, which will be described in more detail below (steps 740 and 750).”

The telephone and PBX are in continuous data communication, and the badge data are transferred either when the PBX requests a transfer (sends an interrupt) or periodically every 2 seconds. Updating to the PBX thus occurs whether the badge information or the microcontroller data frame changes or not, and communication channels are used for updating repetitively and unnecessarily.

Yacenda at col. 10, lines 54 to col. 12, line 19 provides data structure descriptions for badge data forwarding, with the following passages at col. 11, lines 12-24 noted: “The transfer of the badge data to the PBX is preferably via a secondary channel of the PBX, such as the data channel of an IDS 228 PBX, available from EXECUTONE Information Systems, Inc. . . . Alternatively, a robbed bit signaling technique may be used, utilizing the robbed bit technique, one bit within every forth transmission of the microcontroller data frame is utilized for the transmission of the badge data. Thus the effective data transmission rate of the badge data is approximately 2 kilobits, while the overall data transmission rate between the PBX and the telephone is 64 kilobits.”

The Office Action dated October 6, 2004, at page 4, cites three passages in Yacenda that purportedly disclose the limitation of “upon detecting a change in at least one of said records in said base station database, the base station initiates a telephone call to said local telephone network controller, uploads said base station database into the network database, and thereafter disconnects said telephone call, thereby updating said network database to record whether said person is at the given location”. The first passage, col. 17, lines 30-45 and 48-60, describes procedures for providing messages to individuals who are unavailable or whose telephones are busy. Nothing here describes how the PBX is updated with location data, but only how to proceed based on that updated data. The second passage, col. 14, lines 52-54, describes what to do if a searched party is located, and if located and the searching desires no further communication, it says “the telephone connection is terminated by the PBX.” Nothing here deals

with updating the PBX with location data. The third passage, col. 16, lines 5-15, describes how to proceed if a selected group member cannot be found: "The connection between the calling party's telephone and the PBX is then disconnected (step 1824)." Nothing here describes how the PBX is updated with location data. Accordingly, none of the cited passages of Yacenda disclose applicant's invention.

In the Yacenda environment of continuous PBX communication there is a transmission resource penalty for updating information in the manner described by Yacenda. This penalty is avoided by applicant's invention with much greater economic impact in the environment for which applicant's invention is primarily designed. It is respectfully submitted that because of the different context and operation of Yacenda's system, Yacenda cannot be read to suggest either the structure or the advantages of the updating features of applicant's claimed invention.

Bennett does not supply the disclosure missing in Yacenda. Bennett discloses a security system with call management functionality, with an on-premises controller for enabling, disabling or changing telephone service based on user presence and identity as determined by a security controller receiving information via keypad, transponder or voice recognition. However, Bennett contains no disclosure of a base station database record, a network controller database, any arrangement whereby "upon detecting a change in at least one of said records in said base station database, the base station initiates a telephone call to said local telephone network controller, uploads said base station database into the network database, and thereafter disconnects said telephone call, thereby updating said network database to record whether said person is at the given location", or any arrangement "wherein the telephone network controller determines how to provide services to the persons sharing the common telephone line in accordance with the updated network database records". Thus Bennett contains no suggestion to modify Yacenda to achieve the above-described features of the system of the present invention or its advantages.

For the foregoing reasons, it is respectfully submitted that claims 2-7 and 11-46 are in condition for allowance.

Reconsideration is respectfully requested of the rejection under 35 U.S.C. § 103(a) of claims 50-56 as unpatentable over Yacenda further in view of Borland et al 6,246,756 ("Borland"). Claim 50 (and dependent claims 51-56) contain a recitation of each of the features described above with respect to claim 2 that pertain to base station database records, a network controller database, a telephone connection from the base station to a local telephone network

controller, “the base station processor being arranged, upon detecting a change in at least one of said records in said base station database, to initiate a telephone call to said local telephone network controller, to upload said base station database into the network database, and thereafter to disconnect said telephone call, thereby updating said network database”, together with “the network controller being arranged to permit said restricted outbound telephone call to be completed only if said at least one required person is present”. These aspects of the invention, as described above, are not present in Yacenda. Borland requires the use of a keypad entry or a card reader contemporaneously with the making or receiving of an outbound or inbound call (column 16, lines 29-35), and has no database record that has been previously updated to maintain a current record of who is present to control call completion. Borland fails to disclose any of the base database, network controller database, database updating, or network controller control of outbound calls as described above. Applicant’s invention has an updated database record achieved by updating the network controller database when there is a change in the base station database by initiating a telephone call to the local telephone network controller, to indicate whether a required person is present, and to automatically allow the call to be completed if the person is present. Borland doesn’t disclose any basis for combining its disclosure with Yacenda, because the two systems have different contexts and approaches, and even if its disclosure were to be combined with Yacenda the resulting structure would still fail to have the structure or advantages of applicant’s invention of claims 50-56.

Reconsideration is respectfully requested of the rejection under 35 U.S.C. § 103(a) of claims 57-67 as unpatentable over Yacenda further in view of Simon et al 2001/0050976 (“Simon”). Claim 57 (and dependent claims 58-67) contain a recitation of each of the features described above with respect to claim 2 that pertain to base station database records, a network controller database, a telephone connection from the base station to a local telephone network controller, “the base station processor being arranged, upon detecting a change in at least one of said records in said base station database, to initiate a telephone call to said local telephone network controller, to upload said base station database into the network database, and thereafter to disconnect said telephone call, thereby updating said network database”, together with “the network controller being arranged to permit said restricted inbound telephone call to be completed only if said at least one required person is present”. These features, as described above, are not present in Yacenda. Simon discloses an “Integrated Security and Communications System With Secure Communications Link” which brings telephone features such as voice mail and Internet features to security keypads, but fails to disclose any of the base station database,

network controller database, database updating, or network controller control of outbound calls as described above. Applicant's invention has an updated database record achieved by updating the network controller database when there is a change in the base station database by initiating a telephone call to the local telephone network controller, to indicate whether a required person is present, and to automatically allow the inbound call to be completed if the person is present. Simon doesn't disclose any basis for combining its disclosure with Yacenda, because the two systems have different contexts and approaches, and even if its disclosure were to be combined with Yacenda the resulting structure would still fail to have the structure or advantages of applicant's invention.

Yacenda, Bennett, Borland and Simon do not individually or in combination disclose the unique aspects of applicant's invention described above.

For the foregoing reasons, it is respectfully submitted that claims 2-7, 11-46 and 50-67 are now allowable, and reconsideration and allowance of the claims in this case are respectfully requested. If there are any outstanding issues, the Examiner is invited to contact applicant's attorney at 203-838-8037.

Respectfully,
William J. Infosino

By: 

Joseph L. Lazaroff, Attorney
Reg. No. 23096
Tel. 203-838-8037
Fax 203-853-4803

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Correspondence Address:
Mr. S. H. Dworetsky
AT&T Corp.
Room 2A-207
One AT&T Way
Bedminster, New Jersey 07921